

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number  
**WO 2005/018333 A1**

(51) International Patent Classification<sup>7</sup>: **A01N 63/02**,  
65/00, 45/00, 37/38, 37/36, 35/06, 31/16, 31/08 // (A01N  
63/02, 65/00, 45/00, 38/37, 37/36, 35/06, 31/16, 31/08)

(21) International Application Number:  
PCT/GB2004/003423

(22) International Filing Date: 6 August 2004 (06.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0319817.3 22 August 2003 (22.08.2003) GB  
60/497,409 22 August 2003 (22.08.2003) US  
0323335.0 6 October 2003 (06.10.2003) GB  
60/533,053 30 December 2003 (30.12.2003) US  
60/560,270 8 April 2004 (08.04.2004) US  
10/820,147 8 April 2004 (08.04.2004) US

(71) Applicant (for all designated States except US):  
**DANISCO A/S** [DK/DK]; Langebrogade 1, PO Box  
17, DK-1001 Copenhagen K (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COYNE, Bob**  
[US/US]; 9209 Allman, Lenexa, KS 66219 (US).

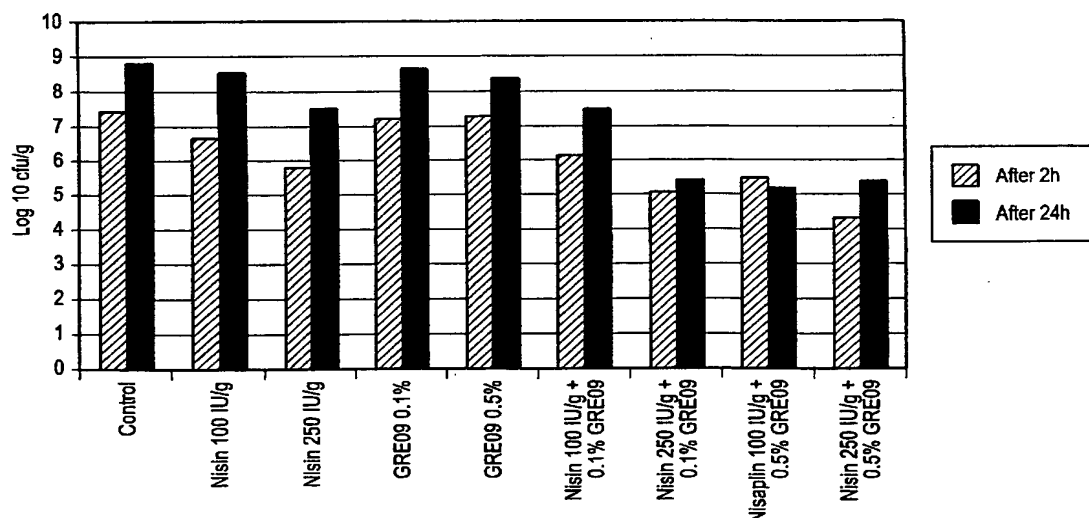
**FARAGHER, John** [US/US]; 3639 E. Cliffe Drive,  
Richfield, WI 53076 (US). **GOUIN, Sébastien** [CA/DK];  
Tjørvaldsensgade 30, 6TV, DK-8000 Århus (DK).  
**HANSEN, Carsten, Bjorn** [DK/DK]; Svanesmindevej  
1. Esby, DK-8420 Knebel (DK). **INGRAM, Richard**  
[GB/GB]; 3 Athelney Way, Yeovil, Somerset BA21 3TN  
(GB). **ISAK, Torben** [DK/DK]; Birkhøj 79, DK-8382  
Hinnerup (DK). **THOMAS, Linda, Valerie** [GB/GB]; 57  
Queens Avenue, Dorchester, Dorset DT1 2EP (GB). **TSE,**  
**Kathryn, Louise** [NZ/DK]; Ved Amagerport 2, 2. TV,  
DK-2300 København S (DK).

(74) Agents: **ALCOCK, David** et al.; D. Young & Co., 120  
Holborn, London EC1N 2DY (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

[Continued on next page]

(54) Title: COMPOSITION COMPRISING A BACTERIOCIN AND AN EXTRACT FROM A PLANT OF THE LABIATAE  
FAMILY



(57) Abstract: The present invention provides a composition comprising (a) an antimicrobial material; and (b) an extract obtained from or obtainable from a plant of the Labiatae family, wherein (a) and (b) are different; wherein the composition contains phenolic diterpenes in an amount of greater than 1.0wt.%, based on the composition, and wherein when the antimicrobial material consists of nisin, the composition comprises carvacrol in an amount of less than 0.075wt.% based on the composition and carvone in an amount of less than 15wt.% based on the composition.

WO 2005/018333 A1



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*